

535-CD-100-001

EOSDIS Core System Project

Science Data Processing Segment (SDPS) Acceptance Data Package for the ECS Project (Release 4)

July 1999

Raytheon Systems Company
Upper Marlboro, Maryland

Science Data Processing Segment (SDPS) Release B Acceptance Data Package for the ECS Project (Release 4)

July 1999

Prepared Under Contract NAS5-60000
CDRL Item #108

RESPONSIBLE ENGINEER

<u>David Vaughan /s/</u>	<u>7/8/99</u>
David Vaughan	Date
EOSDIS Core System Project	

SUBMITTED BY

<u>Kenneth L. Wise /s/</u>	<u>7/8/99</u>
Kenneth Wise, ECS Quality Assurance Manager	Date
EOSDIS Core System Project	

Raytheon Systems Company
Upper Marlboro, Maryland

This page intentionally left blank.

Preface

This document is a formal contract deliverable with an approval code 1. It requires Government review and approval prior to acceptance and use. This document is under ECS contractor configuration control. Once this document is approved, Contractor approved changes are handled in accordance with Class I and Class II change control requirements described in the Earth Observing System (EOS) Configuration Management Plan, and changes to this document shall be made by document change notice (DCN) or by complete revision.

Any questions should be addressed to:

Data Management Office
The ECS Project Office
Raytheon Systems Company
1616 McCormick Drive
Upper Marlboro, MD 20774-5301

This page intentionally left blank.

Abstract

This report is a documented account of the Science Data Processing Segment (SDPS) Acceptance Data Package for the Release 4 RRR held on June 9, 1999.

This report includes:

- a. Reference to the SDPS Release 4 Physical Configuration Audit and Functional Configuration Audit Report, DID 506.
- b. Reference to the SDPS Release 4 Acceptance Test Report, DID 412.
- c. Reference to the Action Items from the SDPS Release 4 RRR.
- d. Reference to Release 4 Version Identification documentation.
- e. Reference to Release 4 Design data.
- f. Reference to SDPS Non-Conformance Reports (NCRs), which are included in the Distributed Defect Tracking System (DDTS).
- g. Reference to the SDPS Release 4 Operations Tools Manual.
- f. Reference to the current Mission Operations Procedures.
- g. Reference to the ECS Project Training Material.

Keywords: Configuration Audits, PCA, FCA, VDD, RRR, Acceptance Test Report, action items, operating manuals, and training material.

This page intentionally left blank.

Change Information Page

List of Effective Pages			
Page Number		Issue	
Title		Original	
iii through x		Original	
1-1 and 1-2		Original	
2-1 through 2-4		Original	
3-1 and 3-2		Original	
AB-1 and AB-2		Original	

This page intentionally left blank.

Contents

Preface

Abstract

1. Introduction

1.1	Identification	1-1
1.2	Scope	1-1
1.3	Purpose	1-1
1.4	Status and Schedule	1-1
1.5	Organization	1-1

2. Referenced Documentation

2.1	Parent Documents	2-1
2.2	Applicable Documents	2-1
2.3	Information Documents	2-3

3. Acceptance Data

3.1	Configuration Audit Reports	3-1
3.2	System Acceptance Test Data	3-1
3.3	Release Version Identification	3-1
3.4	Release 4 Design Data	3-1
3.5	Open Action Items	3-2
3.6	Operating Manuals	3-2
3.7	Training Materials	3-2

Abbreviations and Acronyms

This page intentionally left blank.

1. Introduction

1.1 Identification

This document is the SDPS Release 4 Acceptance Data Package for the ECS Project, which is Item 108 on the Contract Data Requirements List (CDRL) and defined by Data Item Description (DID) 535/PA1 under contract NAS5-60000.

1.2 Scope

This document identifies the SDPS Acceptance Data Package for Release 4 of the ECS Project.

1.3 Purpose

This document includes by reference the information that makes up the SDPS Release 4 Acceptance Data Package. Its purpose is to provide high level information regarding the content and status of the SDPS at the time of the RRR for Release 4, including acceptance testing results, configuration status, any open action items from RRR, the current status of known problems, and to identify release related documentation.

1.4 Status and Schedule

The submittal of DID 535/PA1 meets the milestone specified in the CDRL of the National Aeronautics and Space Administration (NASA) contract NAS5-60000. Current project plans specify that this deliverable is due 30 days after RRR for each scheduled release of the ECS.

1.5 Organization

Section 1 provides the identification, scope, purpose, status and schedule, and document organization.

Section 2 provides a list of documents that were used directly or indirectly in the preparation of this document.

Section 3 defines the SDPS Release 4PY Acceptance Test data package. It includes identification of the Functional Configuration Audit (FCA) and Physical Configuration Audit (PCA) results, identification of system Acceptance Test data, identification and status of action items from RRR, identification of operating manuals, identification of operating procedures, and identification of training materials.

The section Abbreviations and Acronyms contains an alphabetized list of the definitions for abbreviations and acronyms used in this volume.

This page intentionally left blank.

2. Referenced Documentation

2.1 Parent Documents

The parent documents are the documents from which this SDPS Release 4 Acceptance Data Package's scope and content are derived.

420-05-03	Goddard Space Flight Center, EOS Performance Assurance Requirements for the EOSDIS Core System (ECS)
423-41-01	Goddard Space Flight Center, ECS Statement of Work
423-41-03	Goddard Space Flight Center, EOSDIS Core System Contract Data Requirements Document

2.2 Applicable Documents

The following documents are referenced herein in their entirety, and form a part of this document as being delivered specifically for Release 4 of the ECS Project.

412-CD-100-001	ECS System Acceptance Test Report for Release 4
506-CD-110-001	Configuration Audits for Science Data Processing Segment (SDPS) Release 4 of the ECS Project
704-CD-100-003	Science Data Processing Segment Release Readiness Review Presentation Package Update for the ECS Project
914-TDA-093	Version 2 Drop 4PY.01 Patch (AUBURN) Release for the ECS Project
914-TDA-094	Version 2 Drop 4PY.02 Patch Release for the ECS Project
305-CD-100-005	Release 4 Segment/Design Specification
311-CD-102-005	Release 4 Data Management Subsystem Database Design and Schema Specification
311-CD-103-005	Release 4 INGEST Subsystem Database Design and Schema Specification
311-CD-104-005	Release 4 Interoperability Subsystem Database Design and Schema Specification
311-CD-105-005	Release 4 Systems Management Subsystem Database Design and Schema Specification
311-CD-106-005	Release 4 Planning and Data Processing Subsystem Database Design and Schema Specification

311-CD-107-005	Release 4 Science Data Server Subsystem Database Design and Schema Specification
311-CD-108-005	Release 4 Storage Management and Data Distribution Subsystem Database Design and Schema Specification
311-CD-109-005	Release 4 Subscription Server Subsystem Database Design and Schema Specification
313-CD-006-007	Release 4 Internal ICD
609-CD-003-004	Release 4 Operations Tools Manual
625-CD-001-002	ECS Project Training Material Volume 1: Course Outline
625-CD-003-002	ECS Project Training Material Volume 3: Problem Management
625-CD-004-002	ECS Project Training Material Volume 4: System Administration
625-CD-005-002	ECS Project Training Material Volume 5: Network Administration
625-CD-006-002	ECS Project Training Material Volume 6: Production Planning and Processing
625-CD-007-002	ECS Project Training Material Volume 7: Resource Planning
625-CD-008-002	ECS Project Training Material Volume 8: Ingest
625-CD-009-002	ECS Project Training Material Volume 9: Data Distribution
625-CD-010-002	ECS Project Training Material Volume 10: Archive Processing
625-CD-011-002	ECS Project Training Material Volume 11: Database Administration
625-CD-012-002	ECS Project Training Material Volume 12: Configuration Management
625-CD-013-002	ECS Project Training Material Volume 13: User Services
625-CD-016-002	ECS Project Training Material Volume 16: Science Software Integration and Test
625-CD-017-002	ECS Project Training Material Volume 17: System Troubleshooting
625-CD-020-001	ECS Project Training Material Volume 2A: Introduction and Detailed System Overview: Science Data Processing Internal Training

2.3 Information Documents

The following documents are referenced herein in their entirety. The current version of these documents are applicable to Release 4 of the ECS Project, but are not related solely to Release 4.

611-CD-004-004 Mission Operations Procedures

211-TP-005-002 Transition Plan 4PX to 4PY, 4PY to 5A, and 5A to 5B for the ECS
Project

This page intentionally left blank.

3. Acceptance Data

3.1 Configuration Audit Reports

The results of ECS FCA/PCA activities are documented in the Configuration Audits for Science Data Processing Segment (SDPS) Release 4 of the ECS Project, 506-CD-110-001. This report contains the results of FCAs for system acceptance tests, and the results of PCAs for COTS hardware, COTS software, and ECS custom code.

3.2 System Acceptance Test Data

The results of all ECS System acceptance testing is documented in the Acceptance Test Report for Release 4 of the ECS Project, 412-CD-100-001. This report contains listings of all tests conducted, analysis of test results, status of test findings. It identifies the existence and location of all test records.

Release Version Identification

A complete description of the audited version of the Release 4 software is documented in Version 2 Drop 4PY.01 Patch (AUBURN) Release for the ECS Project, 914-TDA-093, and Version 2 Drop 4PY.02 Patch Release for the ECS Project, 914-TDA-094.

Detailed technical information documenting the current Release 4 baseline is maintained by ECSCM, and can be accessed through the Internet at URL <http://cmdm.east.hitc.com/baseline/index.html> under “Technical Documents”. These documents include information on: current operating system versions and patch levels; software port mappings; COTS patch levels; disk partitioning; COTS and ECS Custom Software Release Notes; common start-up and shutdown procedures; complete listings of site-specific hardware and software documents, diagrams, and drawings; vendor information; and network infrastructure information.

Release 4 Design Data

The overall detailed design for Release 4 of the ECS Project is documented in the Release 4 Segment/Design Specification, 305-CD-100-005.

Subsystem specific database design data is contained in the 311-CD-series documents listed as referenced in their entirety in Section 2.2 of this document.

Subsystem to subsystem interface design is contained in the Release 4 Internal ICD, 313-CD-006-007.

3.3 Open Action Items

The results of RRR, together with a list of all action items from RRR, is contained in the Science Data Processing Segment Release Readiness Review Presentation Package Update for the ECS Project, 704-CD-100-003.

The current status of all known non-conformances are maintained by the ECS Project in the Distributed Defect Tracking System (DDTS), and are reported weekly to ESDIS.

3.6 Operating Manuals

The human-machine interface characteristics of the tools used by the ECS operations staff are documented in the Release 4 Operations Tools Manual, 609-CD-003-004.

Procedures for operators, engineers, operations support, administration and management staff to configure, maintain and operate the ECS system are contained in the Mission Operations Procedures, 611-CD-004-004. This document contains DAAC standard procedures which may be modified at the DAACs during subsequent training.

3.7 Training Materials

Training materials for Release 4 of the ECS Project are contained in the 625-CD-series documents listed as referenced in their entirety in Section 2.2 of this document.

Abbreviations and Acronyms

CCB	Configuration Control Board
CCR	Configuration Change Request
CDRL	Contract Data Requirements List
COTS	Commercial Off the Shelf
DCN	Document Change Notice
DDTS	Distributed Defect Tracking System
DID	Data item description
DM	Data Management
ECS	EOSDIS Core System
ECSCM	ECS Project Configuration Management
EOSDIS	EOS Data and Information System
ESDIS	Earth Science Data and Information System (GSFC Code 423)
FCA	Functional Configuration Audit
GSFC	Goddard Space Flight Center
NCR	Non-Conformance Report
PCA	Physical Configuration Audit
QA	Quality Assurance
RRR	Release Readiness Review
TRR	Test Readiness Review
URL	Universal Reference Locator
VDD	Version Description Document

This page intentionally left blank.